

SYSTEM AND METHOD FOR SELECTIVE MEMORY MODULE POWER
MANAGEMENT

ABSTRACT OF THE DISCLOSURE

A memory module includes a memory hub that monitors utilization of the memory module and directs devices of the memory module to a reduced power state when the module is not being used at a desired level. System utilization of the memory module is monitored by tracking system usage, manifested by read and write commands issued to the memory module, or by measuring temperature changes indicating a level of device activity beyond normal refresh activity. Alternatively, measured activity levels can be transmitted over a system bus to a centralized power management controller which, responsive to the activity level packets transmitted by remote memory modules, direct devices of those remote memory modules to a reduced power state. The centralized power management controller could be disposed on a master memory module or in a memory or system controller.